# ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

This appendix lists the management challenges that the NRC's Inspector General identified for FY 2004 in a letter to Chairman Diaz, dated November 5, 2003, and discusses the actions that the agency has taken to address those challenges.

## PROTECTION OF NUCLEAR MATERIAL AND FACILITIES USED FOR CIVILIAN PURPOSES

The NRC continues to reexamine current security measures to ensure adequate protection of the Nation's nuclear materials and facilities. In FY 2004, the agency used a risk-informed approach to assess the potential vulnerabilities of civilian nuclear facilities and activities. The agency coordinated this assessment with counterparts in the Homeland Security Council, the Department of Homeland Security, the Federal Bureau of Investigation, the Department of Energy, the Defense Threat Reduction Agency, and other agencies.

The NRC's comprehensive assessment of the security and safeguards of NRC-licensed nuclear facilities and activities resulted in the following significant improvements in FY 2004:

The NRC developed implementing guidance concerning the design-basis threat against which the Nation's power plants and selected fuel cycle facilities must be able to defend. (The NRC had previously revised the design-basis threat in FY 2003.) The Commission also issued additional Orders to require specific security enhancements for a variety of nuclear facilities and activities, including spent fuel storage and radioactive material transport. Together with the revised design-basis threat, these enhancements represent a significant step in security planning, that is consistent with the current threat environment.

The NRC revised the baseline inspection program for the physical protection cornerstone of the Reactor Oversight Process. This revised baseline program reflects changes imposed by the Commission's Orders in the areas of access authorization, fatigue, security officer training and qualification and the design-basis threat. The NRC will phase in the Implementation of the revised baseline inspection program during FY 2004–FY 2006, consistent with the implementation schedules for the revised requirements. The NRC is also developing improved performance indicators and a revised Significance Determination Process to measure licensees' security performance more effectively.



Consistent with the Commission's Orders revising the design-basis threat, each licensee that operates a power reactor or a Category I fuel cycle facility has submitted a revision of their associated physical security plan(s), contingency response plan(s), and training and qualification plan(s) for NRC staff approval. The NRC staff intends to complete its review of all of these plans by October 29, 2004.

The agency will complete a series of vulnerability assessments in FY 2004 which will provide the technical bases for any new or revised mitigative measures that may be required to protect the Nation's nuclear materials and facilities.

In collaboration with the Department of Homeland Security, the Department of Energy, and other agencies, the NRC continued to assess the potential use of radioactive sources in radiological dispersion devices and to identify necessary enhancements in the control of radioactive sources. As a result, the agency has enhanced the security requirements for license that hold source material(s) designated as "high risk, high priority." The NRC staff continues to work with the Agreement States to develop appropriate enhancements for lower-priority high-risk sources. In addition, working with the Homeland Security Council, its oversight committees in Congress, the Administration, and other Federal agencies, the NRC continues to support legislative proposals to enhance the security of nuclear materials and facilities.

The NRC expanded and strengthened its information security program, which permits sharing of classified and sensitive unclassified information with authorized representatives routinely up to the SECRET National Security Information level. The NRC has significantly enhanced secure communication capabilities at headquarters and in the regional offices. In so doing, the NRC ensured timely communication among authorized individuals, while maintaining effective protection of classified and sensitive unclassified information (both internally and externally) through the use of administrative procedures and requirements that are consistent with Federal law and national programs.

The NRC continued to sustain its interaction, communication, and coordination with other Federal, State, and local agencies, as well as the international community, as it relates to homeland security, emergency response, and integrated response planning. In June 2004, the NRC reorganized to integrate these programs more effectively. The NRC continues to work with the Department of Homeland Security and other Federal agencies to revise Federal response plans and to develop and administer a National Incident Management System and a unified National Response Plan in accordance with Homeland Security Presidential Directive 5, "Management

of Domestic Incidents." The NRC significantly upgraded the agency's Incident Response Operations Center in FY 2004 with additional staffing, improved emergency response procedures, and significant equipment upgrades such as secure telephone and fax units, upgraded satellite phones and an improved teleconferencing system. The NRC established an alternative incident response center at one of the agency's regional offices. This alternative center has all of the capabilities of the headquarters operations center, in the event of a loss of the headquarters facility.

The NRC completed a pilot force-on-force exercise program, which reduced artificialities and increased the realism of the exercises, which were conducted at 15 volunteer commercial nuclear power reactors. The agency has since used the results of the expanded pilot exercises to revise the staff's exercise program and improve the NRC's processes for assessing licensees' readiness to respond to the design-basis threat. The NRC has also met regularly with industry representatives to catalog and discuss the lessons learned from these exercises, documenting both staff and industry perspectives. In implementing the transitional force-on-force program, the NRC has also increased the frequency of force-on-force drills at power reactor facilities from once every 8 years to once every 3 years. As intended, force-on-force exercises have been a primary means to conduct performance-based testing of a licensee's security plan and its ability to prevent radiological sabotage. The agency will complete a transitional force-on-force exercise program in early FY 2005, to be followed by full implementation.

In conjunction with implementing the revised design-basis threat, the NRC established additional personnel security measures to mitigate the risk of insiders' involvement in acts of radiological sabotage or theft or diversion of special nuclear material. Lastly, the NRC has conducted meetings with stakeholders that contributed significantly towards increasing the agency's public outreach and meeting the agency's openness goals in the Homeland Security area.

#### PROTECTION OF INFORMATION

In FY 2004, the NRC continued to maintain compliance with the Federal Information Security Management Act. The NRC's major operational applications and general support systems meet the requirements of Management Directive 12.5, "NRC Automated Information Systems Program," including a system security plan, contingency plan, certification, and accreditation. The NRC staff has increased its efforts to provide independent review, testing, and evaluation of major system security plans. The NRC has an effective information technology security training and awareness program. All employees are required to complete an online information technology security training course, and NRC information systems security officers and other employees and support contractors with significant security responsibilities are required to complete a more advanced online technical security course. The NRC established an information



technology security Web page, providing information that NRC employees need to facilitate timely awareness of information technology security issues. The NRC has a robust incident reporting program in place, and files monthly reports to the Federal Computer Incident Response Center. In FY 2004, the staff will conduct a pilot of a secure Intranet solution to provide the capability for NRC users to process and protect their sensitive information using the agency's network. The NRC staff will determine requirements to field secure Intranet capabilities for all agency users.

On September 26, 2003, the Office of Management and Budget issued guidance for implementing the privacy provisions of the E-Government Act of 2002, which requires the NRC to assess how the agency handles information about individuals when information technology is used to collect new information, when the agency develops or procures new information technology systems to handle the collection of information that identifies specific individuals. The NRC began implementing the requirements of the E-Government Act in FY 2003, based on direction from the Office of Management and Budget that Federal agencies should pattern their procedures after the Internal Revenue Service's "best practices" for Privacy Impact Assessments. Specifically, a privacy impact assessment is required for each new information technology system that handles personal information about individuals. The NRC is currently completing its formal procedures based on experience in reviewing privacy impact assessments during the past year. The NRC is revising the agency's procedures to enhance the staff guidance concerning when to prepare a privacy impact assessment, to provide a standard format for preparing such assessments, and to document the review process. These procedures will help ensure that the NRC will adequately protect personal information concerning members of the public that provide such information electronically.

## DEVELOPMENT AND IMPLEMENTATION OF A RISK-INFORMED AND PERFORMANCE-BASED REGULATORY OVERSIGHT APPROACH

For many years, the NRC has developed and adapted methods for undertaking probabilistic risk assessments and performance assessments to enable the agency to understand better the risks associated with licensed activities. During FY 2004, the NRC built on these methods by supporting the development of calculation tools and experimental results to provide the basis for risk-informed regulation. Risk-informed regulation is a decision-making approach that uses risk analysis, along with engineering studies, to focus regulatory and licensee attention on design and operational issues in a manner that is commensurate with the risks that those issues pose to public health and safety. Incorporating risk analysis into regulatory decisions improves the regulatory process by focusing NRC and licensee attention and activities on the areas of highest risk, thereby reducing unnecessary burden on licensees and increasing efficiency and effectiveness in the use of agency resources.

The NRC's Strategic Plan for FY 2000–FY 2005 states that a key to achieving the agency's strategic and performance goals is to continue to develop and implement risk-informed and performance-based practices in the NRC's regulatory processes. To further our goal of broadly applying risk techniques to the agency's regulatory processes, the NRC has developed a risk-informed regulatory implementation plan. This plan is of such importance that the NRC has included milestones for further implementing the risk-informed regulatory implementation plan as a performance measure in working toward the goal to make the agency's activities and decisions more effective, efficient, and realistic. During FY 2004, the NRC has taken actions across the agency to meet this challenge, as described in the following paragraphs.

Nuclear Reactor Safety: During FY 2004, the NRC assessed stakeholder feedback and reviewed annual assessments to evaluate the agency's success in implementing the revised Reactor Oversight Process. These assessments continue to show that the revised Reactor Oversight Process has resulted in a more objective, risk-informed, and predictable regulatory process. The risk-informed Reactor Oversight Process has focused NRC and licensee resources on aspects of plant performance that have the greatest impact on safe plant operation. One example of the NRC's initiative in this area is the development of a Mitigating Systems Performance Index, a new risk-informed performance index that the NRC and the nuclear industry have jointly proposed as a replacement for the current set of Safety System Unavailability Performance Indicators specified in the Reactor Oversight Process. The benefit of the Mitigating Systems Performance Index to the NRC, the industry, and other stakeholders is that it provides a more accurate indication of the risks associated with changes in the availability and reliability of important safety systems. Toward that end, the index is based on risk-significant functions and uses plant-specific risk models and Fussell-Vesely importance measures.

During FY 2004, the NRC staff published a report (SECY-04-0053), that documents the lessons learned by implementing the Reactor Oversight Process. Based on that report, the staff intends to continue performing annual self-assessments and to report the results to the Commission each year. In FY 2004, the NRC and the industry continued to develop risk-informed improvements to the Standard Technical Specifications for reactors. In addition, the NRC approved a variety of risk management technical specification initiatives, including: (1) allowances for a risk-informed evaluation to determine whether it is preferable to shut down or to continue to operate a reactor plant under certain degraded conditions, and (2) flexibility in determining the required actions to be taken when certain support equipment is not operable but can still function. The NRC also completed an initial acceptance review of an industry proposal for risk management of allowed outage times for technical specification equipment.



The NRC continued to implement improvements to the Reactor Oversight Process. Specifically, the agency improved the Significance Determination Process, which is used to assess the safety significance of reactor events and inspection findings. Toward that end, the NRC added two new methodologies to the Significance Determination Process in FY 2004. The first of these methodologies provides NRC inspectors the tools needed to assess the risk significance of identified fire protection issues while the second provides NRC inspectors with the tools needed to assess the risk significance of identified issues that affect plant safety during shutdown.

During FY 2004, consistent with the Commission's policy statements on technical specifications and the use of probabilistic risk assessment, the NRC and the industry continued to develop risk-informed improvements to the current system of technical specifications. These improvements are intended to maintain or improve safety while reducing unnecessary burden and to bring technical specification requirements into congruence with the Commission's other risk-informed regulatory activities. In addition, in February 2004, the NRC issued for trial use Regulatory Guide 1.200 (formerly known as draft Regulatory Guide DG-1122), "An Approach for Determining the Technical Adequacy of PRA Results for Risk-Informed Activities," and the associated Standard Review Plan Chapter 19.1, "Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." This Regulatory Guide provides guidance to licensees concerning the quality needed for probabilistic risk assessment information used in risk-informed activities. A trial use period was scheduled to test the implementation of the guide through a variety of different risk-informed applications. Based on experience during that trial period, the staff will incorporate lessons learned into a future revision of the regulatory guide, where needed, to improve its efficiency and effectiveness.

During FY 2004, the NRC continued to develop technical information to support possible changes to the agency's emergency core cooling system requirements and acceptance criteria as well as additional guidance concerning how risk analyses should be used in regulatory decision-making. In addition, the NRC staff submitted to the Commission for its approval the final rule amending Title 10, Section 50.69, of the Code of Federal Regulations (10 CFR 50.69) to risk-inform the regulations regarding special treatment requirements. Special treatment refers to "extra" requirements that the NRC imposes on structures, systems, and components, which exceed industry-established requirements for equipment that is classified as "commercial grade." The requirements defined in the proposed rule provide additional confidence that the affected equipment can meet its functional requirements under design-basis conditions. Specifically, the rule establishes risk-informed categorization and treatment of structures, systems, and components. In so doing, it allows licensees to request approval to implement alternative

requirements for inspection, testing, maintenance, and quality assurance (among other activities), based upon their safety significance. The staff submitted the final rule to the Commission with the issuance of SECY-04-0109, "Final Rulemaking to Add New Section 10 CFR 50.69, 'Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors'," dated June 30, 2004. The NRC staff developed the technical basis for a risk-informed selection of a pressurized thermal shock screening criterion to support a potential risk-informed rulemaking effort. The staff documented that technical basis in a draft report issued on December 31, 2002. The NRC staff continued this effort during FY 2004, and is scheduled to issue the final technical basis report in September 2004.

In FY 2004, the NRC continued to develop risk-informed and performance-based rules. Specifically, the NRC published final rules for 10 CFR 50.44, "Combustible Gas Control for Nuclear Reactors," and 10 CFR 50.48, "Fire Protection." The amendment to 10 CFR 50.44 eliminates the requirements for hydrogen recombiners and hydrogen purge systems and relaxes the requirements for hydrogen and oxygen monitoring equipment to make them commensurate with their risk significance. The amendment to 10 CFR 50.48 revises the NRC's fire protection requirements for nuclear power reactor licensees to permit existing licensees to adopt voluntarily fire protection requirements contained in the National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light-Water Reactor Electric Generating Plants, 2001 Edition." Those NFPA-805 fire protection requirements provide a risk-informed, performance-based alternative to the NRC's existing deterministic and prescriptive fire protection requirements.

The NRC staff continued its work to improve the requirements contained in 10 CFR 50.46 as they relate to analysis of design-basis large-break loss-of-coolant accidents and associated emergency core cooling performance and analysis. The NRC staff also proceeded with a number of related activities, including developing frequency estimates for loss-of-coolant accidents and working on a proposed rule to allow use of an alternative maximum break size. The rule revisions and associated plant changes will have to meet specified acceptance criteria for risk-informed decisions. These requirements specify the assumptions, methods, and acceptance criteria for use in evaluating the adequacy of the emergency core cooling system for design-basis loss-of-coolant accidents. The development of a risk-informed approach to 10 CFR 50.46 has the potential to improve significantly the effectiveness of regulatory oversight related to emergency core cooling system performance.

The NRC published a summary report and action plan concerning the staff's efforts to create an environment in which risk-informed methods are integrated into staff activities and in which staff plans and actions are based on the principles of risk-informed regulation.



**Nuclear Materials Safety:** Over the past year, the NRC made significant progress toward increasing the use of risk insights and information where feasible and beneficial. Toward that end, the agency is currently developing guidance documents and risk guidelines to facilitate consistent and effective application of the risk-informed approach.

In FY 2004, the NRC completed a feasibility/scoping study to identify human reliability analysis development needs for the wide range of situations encountered and activities performed by licensees in the Nuclear Materials Safety program. The final report on the feasibility study results for byproduct materials applications was completed and delivered in FY 2004. The staff has reviewed this feasibility study report, and management will use the review findings to prioritize human reliability analysis needs in the Nuclear Materials Safety program.

The NRC identified nuclear material safety and safeguards regulatory applications that are amenable to increased use of risk insights and evaluated recommendations to improve the effectiveness and efficiency of the Byproduct Materials Program. The NRC completed staff guidance for the technical assistance request process, revised the event evaluation policy, and promoted licensees' use of the NUREG-1556 series entitled "Byproduct Consolidated Guidance About Materials Licenses." The staff also incorporated other recommendations into Materials Inspection Manual Chapter 2800, entitled "Materials Inspection Program."

The NRC staff reviewed and revised all inspection procedures in 10 CFR Part 70, which increases the use of risk information in regulating fuel cycle facilities. Specifically, the staff updated these inspection procedures to determine applicability, eliminate duplication of effort, incorporate risk-informed and performance-based approaches, and ensure compatibility with the revised regulations in 10 CFR Part 70. As part of this effort, the staff reviewed integrated safety analysis (ISA) summaries, which represent one aspect of the NRC's implementation of the revised regulations, for individual fuel facility license amendment requests. In addition, the staff began to implement the revised Fuel Cycle Oversight Program, which focuses on risk-informed regulations associated with 10 CFR Part 70. This program includes risk-informed inspections, evaluation of the risk significance of facility events and inspection findings, more effective and predictable enforcement and assessment of licensee performance, and enhanced communication with stakeholders.

The NRC continues to incorporate lessons learned into guidance development in order to enable the agency to apply risk-informed approaches consistently and effectively where appropriate. For example, during FY 2004, the staff conducted two pilot studies to test a proposed systematic risk-informed approach to further the agency's goals of improving the focus on safety, efficiency, and effectiveness.

**Nuclear Waste Safety:** In FY 2004, the NRC continued work on a probabilistic risk assessment of a dry cask storage system. This probabilistic risk assessment study provides a method for quantifying the risks of dry cask storage of spent nuclear fuel and provides insights for improved decision-making concerning regulatory activities associated with 10 CFR Part 72.

Also during FY 2004, the final rule amending the licensing requirements in Part 72 became effective for dry storage of spent nuclear fuel, high-level radioactive waste, and power reactor waste greater than Class C in an independent spent fuel storage installation or a retrievable storage installation monitored by the Department of Energy. Specifically, the final rule allows certain license applicants to use a design earthquake level commensurate with the risk associated with their independent spent fuel storage or monitored retrievable storage installations.

Furthermore, the staff completed the predecisional draft of the Risk-Insights Baseline Report for the High-Level Waste Program. In so doing, the staff used the risk insights to focus the independent assessments on the more risk-significant issues associated with the Department of Energy's pre-licensing program. The staff increased the use of risk information in the issue resolution process by explicitly considering the risk insights in the review of the Department of Energy's agreement submittals. In addition, the NRC received Version 5.0 of the Total-System Performance Assessment code from the Center for Nuclear Waste Regulatory Analysis. The Total-System Performance Assessment code is the staff's primary tool for generating risk information and insights related to post-close repository performance.

In FY 2004, the NRC staff completed initial follow-on activities associated with the FY 2003 evaluation of issues impacting the implementation of the Subpart E of 10 CFR Part 20 (the License Termination rule) and the decommissioning program evaluation. To address the issues identified in the License Termination rule analysis, the staff developed a regulatory issues summary to inform licensees and stakeholders of the options available for use in resolving the license termination issues as well as plans for future actions (including guidance and rulemaking) and plans to risk-inform further the implementation of the License Termination rule.

The NRC completed a feasibility/scoping study to identify human reliability analysis development needs for the wide range of situations encountered and activities performed by licensees in the Nuclear Waste Safety arena. The draft report on the feasibility study results for waste applications was completed and delivered in FY 2004. The staff has reviewed this feasibility study report, and management will use the review findings to prioritize human reliability analysis needs in the Nuclear Waste Safety program.



The NRC staff drafted an integrated plan to identify actions and activities that address the programmatic issues identified in the FY 2003 decommissioning program evaluation. In a related followup activity, the staff drafted a prioritization scheme to ensure that the agency focuses its resources on those sites that pose the greatest risk or where delaying decommissioning may have some other adverse impact.

## ABILITY TO MODIFY REGULATORY PROCESSES TO MEET CHANGING EXTERNAL DEMANDS

The NRC uses its Planning, Budgeting, and Performance Management process to integrate the agency's regulatory processes and ensure that the agency is able to respond to changes in its environment. Each year, the Program Review Committee holds planning sessions to ensure that the Commission's regulatory processes are integrated and resources allocated where needed. The Commission approves these plans during the budget process. In addition, the Executive Director for Operations holds meetings to ensure integration across NRC programs.

The NRC issues regulations that are considered necessary to ensure that licensees operate their reactor facilities in a safe manner and that the agency meets its strategic goal to protect public health and safety. Any rule imposing requirements needs a backfit analysis (in accordance with the Backfit rule set forth in 10 CFR 50.109) justifying that the requirements either are necessary for adequate protection or are cost-beneficial safety enhancements. Completed regulatory actions reflecting this position during FY 2004 included Performance-Based Risk-Informed Fire Protection and Risk-Informed 50.44 Rulemaking.

Quarterly meetings of the Probabilistic Risk Assessment Steering Committee ensure that risk-informed activities are integrated across the agency. Similarly, the participation of NRC managers on the Research Effectiveness Review Board ensures that the agency's research program effectively meets agencywide needs.

The NRC relies on a Risk Steering Committee, which provides guidance and sets expectations for implementing risk-informed initiatives in the Nuclear Materials and Waste Safety programs. The committee comprises agency experts who offer guidance in risk-informing initiatives. These experts also provide peer review of risk-informed products.

The NRC and representatives from the Nuclear Engineering Institute hold periodic Fire Protection Issues Management Meetings. These meetings provide a forum through which the NRC and the industry identify and prioritize emerging fire protection issues, and develop approaches for issue resolution.

The NRC's Rulemaking Coordinating Committee, established in 1998, ensures that the agency's rulemaking process remains consistent throughout the NRC. The primary focus of the Rulemaking Coordinating Committee is to ensure consistency in methods used to develop and promulgate rules and to facilitate initiatives for improving all aspects of the rulemaking process.

The staff continued to prepare for receipt of the Department of Energy's anticipated high-level waste repository license application and the associated hearings. This cooperative effort involves putting the systems and processes in place to fulfill the 3-year mandate.

## Acquisition and Implementation of Information Resources

The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Expanded Electronic Government under the Federal Information Security Management Act."

#### ADMINISTRATION OF ALL ASPECTS OF FINANCIAL MANAGEMENT

The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Improved Financial Management."

## COMMUNICATION WITH EXTERNAL STAKEHOLDERS THROUGHOUT NRC REGULATORY ACTIVITIES

The NRC issued guidelines for effectively communicating risk-related information to external stakeholders ("Effective Risk Communications," NUREG/BR0308, dated January 2004). The document provides easy-to-use guidance for agency staff and management concerning NRC-specific communication topics and situations that deal with risk to ensure the agency's openness with the public. The guidance contains practical suggestions, tailored to the NRC's needs, that reflect the risk communication best practices learned from researchers, trainers, and practitioners from numerous Federal, State, private, and educational organizations.

**Nuclear Reactor Safety:** The NRC developed and implemented an array of plans governing communications concerning topics such the recent events at the Davis-Besse Nuclear Power Station and the Vermont Yankee Generating Station, fire protection, and Generic Safety Issue 191, "Assessment of Debris Accumulation on Pressurized-Water Reactor Sump Performance."



As of the third quarter of FY 2004, the NRC's license renewal program staff has conducted 20 public meetings concerning the NRC's license renewal application review process, environmental issues, and public outreach associated with the continued operation of nuclear power plants. The targeted goal for FY 2004 is three scheduled public outreach meetings, and the staff is on schedule to meet this goal by the end of FY 2004. These meetings afforded the NRC the opportunity to solicit stakeholder viewpoints. They also allowed a meaningful exchange of information with external stakeholders concerning the potential environmental effects of continued operation, the license renewal process, and opportunities for public involvement. The NRC held these meetings in the vicinity of those affected by the actions to be discussed.

As of the second quarter of FY 2004, the NRC staff has held five public outreach meetings concerning issues surrounding the reactor vessel head degradation at the Davis-Besse Nuclear Power Station and the NRC's related response and evaluation. These meetings informed external stakeholders about the status of the NRC's oversight activities as well as the Davis-Besse restart activities and gave citizens the opportunity to comment and ask questions.

The NRC also held a public meeting in the vicinity of the Vermont Yankee Nuclear Generating Station to discuss the NRC's power uprate review process and to receive feedback from the public. In addition, the NRC held public meetings in the vicinity of each nuclear power plant during FY 2004 to discuss the NRC's annual assessment of each plant's safety performance. These meetings provided external stakeholders information on each plant's safety performance and the NRC's role in ensuring safe operation. In September and October 2003, the NRC received three early site permit applications for the Clinton, North Anna, and Grand Gulf sites. The staff's review of these applications will continue throughout FY 2004 and FY 2005, ending in FY 2006. As of the third quarter of FY 2004, the NRC has held all three of the scheduled public meetings to inform the respective communities of the NRC's regulatory role and the process for evaluating early site permit applications.

**Nuclear Materials Safety:** During FY 2004, the NRC coordinated with the Department of Energy on several projects. In particular, these projects included the mixed-oxide fuel fabrication facility, the potential for NRC (external) regulation of the Department of Energy's non-defense laboratories, and issues related to gas centrifuge uranium enrichment.

As of May 31, 2004, the NRC's fuel cycle facilities licensing and inspection program staff has conducted 15 public meetings concerning significant regulatory issues. These meetings gave the NRC the opportunity to solicit stakeholder viewpoints and provided stakeholders the opportunity to exchange information on a variety of issues including the gas centrifuge and

mixed-oxide fuel fabrication facility licensing initiatives. Most of these meetings took place in the vicinity of those affected by the respective actions.

In December 2003, the NRC issued for public comment a proposed rule to amend the agency's requirements for training and experience, as set forth in 10 CFR Part 35, "Medical Use of Byproduct Material." The NRC staff developed the proposed rule with input from professional speciality boards and other members of the public as well as the NRC's Advisory Committee on the Medical Uses of Isotopes. The NRC staff also worked closely with the States to ensure a cooperative dialogue concerning the regulation of radioactive material. In addition, NRC staff representatives participated in the Organization of Agreement States meetings in October 2003 and September 2004, as well as the Conference of Radiation Control Program Directors meeting in May 2004. At these meetings, the staff representatives reported on the status of rulemakings, implementation of 10 CFR Part 35, and the various working groups in which States participate and have special interest. In addition, the staff made several "poster" presentations.

In FY 2004, the NRC staff developed a generic communication plan for rulemakings. The primary goal of this plan is to ensure that the NRC conveys a consistent message to all internal and external stakeholders.

In addition, the NRC maintains a public Web site to facilitate communication with stakeholders. This site provides a variety of links to pertinent documents, updates on current activities, and information on opportunities for stakeholder input.

**Nuclear Waste Safety:** During FY 2004, NRC representatives met with elected officials, members of the public, and other representatives from the State of Nevada and several counties to address health and safety issues associated with a possible licensing decision concerning the proposed high-level waste repository at Yucca Mountain. The NRC representatives also provided an overview of the agency's role in the potential licensing of the repository at several public outreach meetings in Nevada. Examples of public meetings to communicate the NRC's role in the potential licensing of the proposed Yucca Mountain high-level waste repository included an open house meeting, a workshop for tribal representatives on the licensing process and technical issues associated with the proposed repository, and a presentation to the National Conference of State Legislatures High Level Waste Working Group.

The NRC conducted more than 30 public workshops, conferences, and "town hall" meetings with interested stakeholders, including Federal, State, and local elected officials; international bodies; the nuclear industry; and public interest groups to address the public's growing interest in the safety of spent fuel storage and transportation. The NRC and the Department of



Transportation conducted joint public meetings to seek input and inform national positions prior to significant meetings of the International Atomic Energy Agency concerning international transport regulations. The NRC updated and continued to implement the communications plans for the Package Performance Study and spent fuel transportation, which provide a focused approach for public outreach and communication related to spent fuel transportation.

The NRC conducted several public meetings with interested stakeholders concerning various sites or projects undergoing environmental review or scoping processes, including the West Valley Demonstration Project and controlling the disposition of solid materials.

The NRC held numerous public meetings and more than 15 technical meetings with licensees (which were also open to the public) to discuss issues regarding sites undergoing decommissioning, including the Mallinkrodt; Jefferson Proving Ground; AAR Manufacturing, Inc.; SCA Services, Inc.; and Tobico Marsh materials sites as well as the Yankee Rowe power reactor site. In addition, the staff developed communications plans for power reactors undergoing decommissioning.

The NRC maintains a public Web site to facilitate communication with stakeholders. This site provides a variety of links to pertinent documents, updates on current activities, and information on opportunities for stakeholder input. In FY 2004, the staff augmented the site by adding semiannual reports related to the rulemaking for controlling the disposition of solid material, as well as notices and links to NUREG/CR-6682, "Summary and Categorization of Public Comments on Controlling the Disposition of Solid Materials." The staff added the March 2004 Scoping Summary Report on controlling the disposition of solid material, which contains a concise summary of the public comments received in regard to the scope of the generic environmental impact statement as well as the alternatives and environmental impacts that the generic environmental impact statement should address.

## Interagency Communication (Up, Down, and Across Organizational Lines)

The NRC staff routinely develops communications plan to emphasize important topics that need to be communicated both internally and externally. Talking points and briefing papers are developed on major activities to ensure consistency in key messages. The agency has also emphasized efficient meeting policies, promoted team-building, and supported intra-office efforts to share important information across the agency.

The NRC continues to update and improve methods for meeting the information needs of employees. Announcements have been streamlined, and values are emphasized. Individual

offices will continue developing and updating their own individual Web pages linked to the agency's internal home page.

The NRC is establishing a Communications Council, which will plan, coordinate, and implement the agency's internal communication strategies and share best practices that will add value across the agency.

Internal NRC communications have increased, and a growing number of offices periodically issue internal electronic newsletters. The agency has developed "EDO updates" through which the Executive Director for Operations regularly communicates important information to all agency staff, and the agency frequently issues staff memoranda concerning a variety of internal communication subjects. In addition, several individual offices have undergone detailed internal communication studies. These activities have included administering surveys, holding focus groups, and creating methods for collecting internal feedback.

The NRC regularly emphasizes good communication practices for use by agency managers. These practices include face-to-face communications, frequent feedback, and two-way communications. New leadership courses will also emphasize these practices and stress coaching and team-building. In addition, many offices have created their own communication-related positions or teams tasked with addressing stakeholder concerns, fostering good internal and external communication practices, and addressing related policy matters.

The NRC is reinforcing the agency's safety mission through e-mail messages, messages on the internal Web page, posters, memoranda, and other media. The agency is asking managers to emphasize that all performance goals support safety because they allow the NRC and its licensees to focus attention on those activities that are most important to safety. Agency managers will reinforce the linkage between the NRC's daily activities and the agency's safety mission.

The offices involved in the Nuclear Reactor Safety program met periodically with intra-agency stakeholders to enhance communication and support functions. Offices in this program also identified internal stakeholders as a target audience in their communications plans.

In addition, the Office of Nuclear Reactor Regulation developed communications plan for nuclear reactor regulation to support achievement of the agency's mission by providing tools, processes, and guidance to improve internal and external communication. The office will continue to propose and develop new and expanded communication efforts to encourage internal sharing of ideas; improve the flow of information among staff and management; and improve the timeliness, accuracy, and clarity of both internal and external communications.



During FY 2004, the NRC continued to improve the interfaces among its component offices through periodic meetings to enhance integration and cooperation. Communication between headquarters and regional offices continued to improve as a result of frequent conference calls at both the staff and senior management levels as well as trips, weekly informational e-mail messages, and the effective use of internal Web pages. The offices also continued to rotate staff and management assignments throughout the organization to increase team-building.

Communication between the Office of Nuclear Reactor Regulation and the agency's other program and support offices is improving as a result of agencywide support of the monthly Communication Council meetings. These meetings encourage sharing of best practices and lessons learned that add value across the agency. In addition, routine interactions with the NRC's new Director of Communications assist the staff in defining, implementing, and continually improving communications.

Examples of communication-related efforts undertaken by the Office of Nuclear Materials Safety and Safeguards include training meetings with regional office staff concerning the revisions to 10 CFR Part 71 continuation of an active program for inter- and intraoffice rotational assignments; semi-annual meetings with the Office of Nuclear Regulatory Research to review the status of ongoing research projects; monthly Decommissioning Management Board meetings to enhance communication concerning decommissioning program activities and semiannual headquarters/regional counterpart meetings to discuss programmatic and technical issues in a focused, structured manner; and biweekly conference calls with the regions and other internal stakeholders.

#### Managing Human Capital

The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Strategic Management of Human Capital."